

ABSTRACT

Media encoding, transmission, and playback processes and structures employ a multi-channel architecture with different audio channels corresponding to different playback rates for a presentation to be transmitted over a network. Audio frames in the various audio channels all correspond to the same amount of time in the original presentation and have frame indexes that identify in the different audio channels the frames corresponding to the same time interval in the presentation. A user can make a real-time change in playback rate causing selection of a channel corresponding to the new playback rate and a frame required for prompt and smooth transition in the playback rate of the presentation. The architecture can additionally provide channels for graphics data such as image data that are displayed according to the index of the audio, and different audio channels with the same playback rate but different compression schemes for use according to available bandwidth on the network.